

"There are many ways in which the environment can be thought of as a medical patient whose health depends on ecological rather than physiological processes," says Dr. Ted Leighton, Head of Pathology at WCVU. "The approach veterinary students learn to use to manage the health of a patient—examination, diagnosis, treatment and prevention—is also an appropriate approach for identifying and solving many environmental problems."

College faculty and other specialists are to teach the program. A workshop to train them and hammer out course details will be held this fall, with the first classes for students planned for next year.

The Max Bell Foundation has approved a grant of more than \$150,000 to support the course during its first four years. Deans of the four colleges have agreed to assume total financial responsibility by year five.

Since its establishment in 1972 as part of the estate of George Maxwell Bell, a Canadian businessman, entrepreneur and philanthropist, the Foundation has made grants of about \$43 million. Funding is currently directed to projects in three specific fields chosen for their importance to Canadians: health services, veterinary medicine and Canada and the Asian Pacific.

OIE Manual of Standards for Diagnostic Tests and Vaccines. The purpose of the Manual is to contribute to the harmonisation of methods of surveillance and control of important animal diseases. Standard methods are described for laboratory diagnostic tests and the production and control of biological products (principally vaccines) for veterinary use in laboratories across the world. The availability of such standards should increase the effectiveness of measures undertaken to improve animal health worldwide. The Manual complements the International Animal Health Code in that standard methods are given for the diagnostic tests and for the control of biological products referred to in the Code. The Manual has been written and revised by experts of established international standing and is unique in that each chapter has been approved by the Veterinary Services of all the OIE Member Countries (123 in June 1992). The first chapter of the Manual contains general information on sampling methods, sterility tests and laboratory safety. Each of the subsequent chapters is devoted to a single disease or to two or three closely related diseases. Each chapter includes a summary intended for veterinary officials and other readers who require a general overview of the tests and vaccines available for the disease. This is followed by a text intended for laboratory workers, giving details of diagnostic tests and, where appropriate, the requirements for vaccines or other biological products. Bibliographical references are listed at the end of each chapter. Volumes I, II and III of the Manual were first published in 1989, 1990 and 1991 respectively. The combined volume, which will be released in October 1992, contains essentially the same information. Certain important diagnostic tests which previously only received mention or a brief description, or which have become more widely used since the chapters were first written, are now described in greater detail. All the OIE Lists A and B diseases (excluding fish diseases) are presented in this volume, together with a few additional related diseases of importance for international trade. The list of these diseases is given overleaf. The Manual has been designed for practical use in the laboratory; it has a plastic cover and is firmly bound and stitched. The Manual is available in English only. However, French and Spanish Translations of the most important tests (those described by the OIE International Animal Health Code for international trade in animals and animal products) appear in a supplementary booklet available with the Manual. For ordering information, contact Office International des Epizooties, 12 Rue de Prony, 75017 Paris, France; Tel.: (1)44.15.18.88; Fax: (1)42.67.09.87; Telex epizoti 642 285; Cable Interepizooties.

Quarterly Wildlife Mortality Report. The following highlights mortality reported to the National Wildlife Health Research Center (NWHRC) from April to June 1992.

Eight duck plague outbreaks were confirmed this quarter in 5 states; all outbreaks involved muscovy and other captive reared ducks. Outbreaks occurred at a variety of locations that included a game farm that raises muscovy and mallard ducks for sale/release, a tidal creek, a suburban housing area lake, a hospital lake, a farm and a large municipal reservoir. At 6 sites, extensive site disinfection and removal of all waterfowl was completed; these sites will continue to be monitored for mortality through next spring at which time sentinel ducks will be placed on the areas to monitor for evidence of duck plague virus.

At least 30 lesser scaup succumbed from *Sphaeridiotrema globulus* infection in Lake Michigan near Chicago. No other waterfowl were known to be infected but there were only few diving ducks present in the area. Dabbling ducks and geese in the area most likely were not feeding on snails, the most common intermediate host for this trematode. *Sphaeridiotrema* was also diagnosed as the cause of death for waterfowl on Brown's Lake in Montana. The disease has previously occurred in both states.

Mortality occurred during late May in purple martins across Kansas, Texas, Missouri and Arkansas. The primary diagnostic finding was emaciation. It is believed the birds died of starvation and mild hypothermia caused by harsh spring weather conditions.

SCWDS reported three mortality events suspected to be a result of exposure to toxins. In Virginia,

al patient whose health
Head of Pathology at
patient—examination,
ring and solving many

rain them and hammer
or next year.

port the course during
responsibility by year

Canadian businessman,
n. Funding is currently
dians: health services,

se of the Manual is to
rtant animal diseases.
nd control of biological
The availability of such
imal health worldwide.
methods are given for
ode. The Manual has
ne in that each chapter
23 in June 1992). The
ty tests and laboratory
r three closely related
er readers who require
ved by a text intended
the requirements for
end of each chapter.
991 respectively. The
the same information.
f description, or which
ribed in greater detail.
olume, together with a
hese diseases is given
a plastic cover and is
French and Spanish
l Animal Health Code
booklet available with
es, 12 Rue de Prony,
285; Cable Interepizo-

orted to the National

aks involved muscovy
included a game farm
housing area lake, a
infection and removal
ty through next spring
f duck plague virus.
n Lake Michigan near
iving ducks present in
hills, the most common
ne cause of death for
th states.

Missouri and Arkansas.
f starvation and mild

to toxins. In Virginia,

doves and grackles died following application of Furadan to a nearby agricultural field. Hawks, a gray fox and a racoon are suspected to have died in South Carolina following ingestion of Temik. The Laboratory of Wildlife Disease Research in Gainesville, Florida, reported Dursban toxicosis in cattle egrets in Alachua County, Florida; ingesta contained crickets.

Approximately 135 common flickers and sora rails were found along the shoreline of Lake Michigan. Mortality is suspected to be storm related, although no other species were found.

QUARTERLY WILDLIFE MORTALITY REPORT

April 1992 to June 1992

Location	State	Dates	Species	Mor- tality	Diagnosis	*Report- ed by
Atlantic Flyway						
Alachua County	FL	03/22/92-03/22/92	Cattle Egret	20 (e)	Toxicosis: chlor- pyrifos suspect	FL
Lake Talquin	FL	05/07/92-05/20/92	Mallard	5	Toxicosis: diazi- non	SC
Gordon County	GA	02/15/92-02/15/92	Common Grackle Red-winged Black- bird	5 (e)	Toxicosis: Fam- phur	SC
Hall County	GA	05/20/92-05/20/92	Canada Goose	3	Toxicosis: diazi- non	SC
Calhoun	GA	01/29/92-01/29/92	Common Grackle	9 (e)	Toxicosis suspect	SC
Riviera Beach	MD	05/04/92-05/15/92	Muscovy Duck Mallard	12 (e)	Duck plague	MD, NW
Ocean City	MD	05/13/92-06/06/92	Northern Gannet Sooty Shearwater	19	Aspergillosis/ pneumonia/ emaciation	NW
Stillpond	MD	05/28/92-06/10/92	Muscovy Duck	25	Duck plague	MD, NW
Baltimore area	MD	06/21/92-06/25/92	Muscovy Duck	2	Duck plague	MD, NW
Emmaus	PA	05/08/92-06/10/92	Muscovy Duck	60 (e)	Duck plague	PA, NW
Edgefield Coun- ty	SC	04/09/92-04/09/92	Red-tailed Hawk Gray Fox Raccoon	6	Toxicosis suspect	SC
Newport News	VA	04/17/92-05/06/92	Muscovy Duck	13	Duck plague	NW
Caroline Coun- ty	VA	04/24/92-04/24/92	Mourning Dove Common Grackle	6 (e)	Toxicosis suspect	SC
Grafton	VA	05/06/92-05/26/92	Mallard	15 (e)	Toxicosis: or- ganophospho- rus cmpd.	NW
Partlode	VA	05/08/92-05/08/92	American Robin	2 (e)	Toxicosis suspect	SC
Newport News	VA	06/21/92-07/08/92	Muscovy Duck	7	Duck plague	NW
Williamsburg	VA	06/21/92-06/21/92	Mallard hybrid	10	Toxicosis: or- ganophospho- rus cmpd.	NW
Gilman	WV	03/16/92-03/31/92	Blue Jay European Starling Mourning Dove English Sparrow Northern Cardinal	27 (e)	Toxicosis: Fam- phur	SC
Mississippi Flyway						
Lake Gunters- ville	AL	03/01/92-03/01/92	Common Loon	10 (e)	Open	SC
NW Arkansas	AR	05/29/92-05/30/92	Purple Martin	150 (e)	Emaciation	NW
Chicago	IL	03/30/92-04/29/92	Lesser Scaup	38 (e)	Parasitism: <i>Sphaeridiotre- ma globulus</i>	NW
Crab Orchard NWR	IL	05/26/92-06/02/92	Mallard Domestic Duck	18	Toxicosis: or- ganophospho- rus cmpd.	NW
Wheeling	IL	06/24/92-06/26/92	Mallard	15	Botulism type C	NW
McCook	IL	05/27/92-05/27/92	Canada Goose	6	Toxicosis: oiling suspect	IL

QUARTERLY WILDLIFE MORTALITY REPORT

April 1992 to June 1992

Continued.

Location	State	Dates	Species	Mortality	Diagnosis	*Reported by
Maysville	KY	06/10/92-07/01/92	Mallard Mallard hybrid	50	Toxicosis suspect (blue-green algae)	KY
Midland County	MI	01/24/92-02/07/92	House Sparrow	9	Salmonellosis	RL
Cheboygan & Otsego Counties	MI	07/01/91-08/01/91	Mourning Dove	22 (e)	Trichomoniasis	RL
Greensfield Village	MI	10/16/91-10/16/91	Canada Goose	10	Toxicosis: diazinon	RL
Ortonville	MN	05/01/92-05/15/92	Mallard	30 (e)	Botulism type C	NW
Lawrence County	MO	05/25/92-05/30/92	Purple Martin	150 (e)	Emaciation	NW
Barton County	MO	05/26/92-05/30/92	Purple Martin	100 (e)	Emaciation	NW
Milwaukee & Manitowoc Counties	WI	04/19/92-04/20/92	Common Flicker Sora Rail	135 (e)	Open	NW
Horicon	WI	06/23/92-06/23/92	Canada Goose	4	Avian pox	NW
Central Flyway						
Greeley	CO	04/05/92-04/24/92	Muscovy Duck	11 (e)	Duck plague	NW
Denver Zoo	CO	04/22/92-04/24/92	Red-breasted Merganser	3	Open	NW
Emporia	KS	05/27/92-06/01/92	Purple Martin	70 (e)	Emaciation	NW

DIAGNOSTIC RIDDLES . . . Continued from preceding pages.

What is your Diagnosis?

Answer: Verminous ulcerative proventriculitis and esophagitis caused by *Streptocara* sp. and *Tetrameres* sp.

Comment: Although heavy infections of *Tetrameres* sp. have been linked with proventriculitis in a wide range of waterfowl, *Streptocara* sp. (*S. crassicauda* and *S. incognita*) have been recognized as a significant cause of ulcerative proventriculitis/gastritis/esophagitis for about the last 20 years (Sterner and Stackhouse, 1987, Journal of Wildlife Diseases, 23:680-682; Tuggle, Windingstad, and Locke, WDA Conference, 1989, abstract #42). The damage observed in association with these nematodes is apparently mechanical in nature.

Contributors: J. Christian Franson, Barry G. Campbell, and Karen Woods, U.S. Fish and Wildlife Service, National Wildlife Health Research Center, 6006 Schroeder Road, Madison, Wisconsin 53711.

Note from the Editor: Please send meeting announcements, diagnostic riddles, position and grant announcements, miscellaneous items, etc. for the Supplement to the Journal of Wildlife Diseases to Tonie E. Roche, National Wildlife Health Research Center, 6006 Schroeder Rd., Madison, WI, 53711. **Double-spaced** typewritten material preferred. Deadline for submission of articles for the next issue (January 1993, JWD Vol. 29, No. 1) is December 1, 1992.